### PATENT COOPERATION TREATY

	From the INTERNATIONAL BUREAU
PCT	То:
NOTIFICATION OF ELECTION  (PCT Rule 61.2)  Date of mailing (day/month/year)  07 February 2001 (07.02.01)	Commissioner US Department of Commerce United States Patent and Trademark Office, PCT 2011 South Clark Place Room CP2/5C24 Arlington, VA 22202 ETATS-UNIS D'AMERIQUE in its capacity as elected Office
International application No.	Applicant's or agent's file reference
PCT/US00/17637	CM2340/2B
International filing date (day/month/year) 27 June 2000 (27.06.00)	Priority date (day/month/year) 28 June 1999 (28.06.99)
Applicant	20 Julie 1333 (20.00.33)
EVANS, Erica, Louise et al	
1. The designated Office is hereby notified of its election made      X   In the demand filed with the International Preliminar     27   December     In a notice effecting later election filed with the Inter     X   was     Was not     was not     was designated Office is hereby notified with the Inter     X   was     Was not     Was not     Was not     Was     Wa	y Examining Authority on: 2000 (27.12.00)  national Bureau on:
	Authorized officer
The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Pascal Piriou

Form PCT/IB/331 (July 1992)

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Facsimile No.: (41-22) 740.14.35

Telephone No.: (41-22) 338.83.38

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applican	's or ac	ent's file reference	1			
CM234			FOR FURTHER AC		cation of Transmittal of Internation ry Examination Report (Form PCT)	
Internation	nal app	plication No.	International filing date (da	ay/month/year)	Priority date (day/month/year)	
PCT/US	300/1	7637	27/06/2000		28/06/1999	
Internation A61K7/	/50	ent Classification (IPC) or nat	tional classification and IPC			
		ER & GAMBLE COMPA	ANY et al.			
		national preliminary exami esmitted to the applicant a		repared by this Int	ernational Preliminary Examin	ing Authority
2. This	REPO	ORT consists of a total of	7 sheets, including this o	cover sheet.		
	been a	eport is also accompanied amended and are the bas Rule 70.16 and Section 60	is for this report and/or s	heets containing re	on, claims and/or drawings whe ctifications made before this and PCT).	ich have Authority
The	se ann	exes consist of a total of	sheets.			
3. This	report	contains indications relat	ing to the following items	s:		
ı	$\boxtimes$	Basis of the report				
II						
111	$\boxtimes$	Non-establishment of or	pinion with regard to nove	elty, inventive step	and industrial applicability	
IV				•		
V	⊠	Reasoned statement un citations and explanation	der Article 35(2) with reg ns suporting such statem	ard to novelty, inv	entive step or industrial applica	ability;
VI		Certain documents cited				
· VII	$\boxtimes$	Certain defects in the int	ternational application			
VIII	⊠	Certain observations on	the international applicat	tion		
Date of su	bmissic	on of the demand	[	Date of completion of	this report	
27/12/20	000		1	2.07.2001		
	y exami Euro	g address of the international ining authority: _ pean Patent Office	A	Authorized officer		STATE OF SMITH BY
<i>)</i> ))		)298 Munich	1	Hillebrecht, D		
Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465				elephone No. 140 9		Ray Brun Bre 10

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/US00/17637

l. Basis of the reper
-----------------------

1.	the and	receiving Office in	nents of the international application (Replacement sheets which have been furnished to response to an invitation under Article 14 are referred to in this report as "originally filed" this report since they do not contain amendments (Rules 70.16 and 70.17)):
	1-3	6	as originally filed
	Cla	ims, No.:	·
	1-1	0	as originally filed
2.	lan	guage in which the i	nuage, all the elements marked above were available or furnished to this Authority in the nternational application was filed, unless otherwise indicated under this item.
	The	ese elements were a	available or furnished to this Authority in the following language: , which is:
			translation furnished for the purposes of the international search (under Rule 23.1(b)).
			blication of the international application (under Rule 48.3(b)).
		the language of a t 55.2 and/or 55.3).	ranslation furnished for the purposes of international preliminary examination (under Rule
3.	With inte	n regard to any <b>nuc</b> rnational preliminar	leotide and/or amino acid sequence disclosed in the international application, the yexamination was carried out on the basis of the sequence listing:
		contained in the int	ternational application in written form.
		filed together with t	the international application in computer readable form.
		furnished subseque	ently to this Authority in written form.
		furnished subseque	ently to this Authority in computer readable form.
		The statement that the international ap	the subsequently furnished written sequence listing does not go beyond the disclosure in plication as filed has been furnished.
		The statement that listing has been fur	the information recorded in computer readable form is identical to the written sequence nished.
4.	The	amendments have	resulted in the cancellation of:
		the description,	pages:
		the claims,	Nos.:
		the drawings,	sheets:
5.		This report has bee	en established as if (some of) the amendments had not been made, since they have been eyond the disclosure as filed (Rule 70.2(c)):

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6.	Add	ditional observations, if n	ecessar	ry:	
111.	Noi	n-establishment of opir	nion wit	h regard	to novelty, inventive step and industrial applicability
1.					appears to be novel, to involve an inventive step (to be non- e not been examined in respect of:
		the entire international a	applicati	ion.	
	×	claims Nos. 10.			
be	caus	se:			
	Ճ	the said international ap not require an internation see separate sheet			said claims Nos. 10 relate to the following subject matter which does examination (specify):
		the description, claims of that no meaningful opin			cate particular elements below) or said claims Nos. are so unclear ned (specify):
		the claims, or said claim could be formed.	ns Nos.	are so in	adequately supported by the description that no meaningful opinion
		no international search	report h	as been (	established for the said claims Nos
	and	eaningful international pa or amino acid sequence ructions:	relimina listing t	ry examir to comply	nation cannot be carried out due to the failure of the nucleotide with the standard provided for in Annex C of the Administrative
		the written form has not	been fu	ırnished o	or does not comply with the standard.
		the computer readable f	orm has	s not bee	n furnished or does not comply with the standard.
		soned statement under			ith regard to novelty, inventive step or industrial applicability;
1.	Stat	ement			
	Nov	elty (N)	Yes: No:	Claims Claims	4,7 1-3,5,6,8-10
	Inve	ntive step (IS)	Yes: No:	Claims Claims	1-10
	Indu	strial applicability (IA)	Yes:	Claims	1-9

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/US00/17637

No: Claims

2. Citations and explanations see separate sheet

#### VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted: see separate sheet

#### VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made: see separate sheet

**EXAMINATION REPORT - SEPARATE SHEET** 

Reference is made to the following documents:

D1: US-A-5 804 205 (EPSTEIN ET AL.) 8 September 1998 cited in the application

D2: EP-A-0 780 116 (SHISEIDO COMPANY LIMITED) 25 June 1997

D3: WO 98 52530 A (THE PROCTER & GAMBLE COMPANY) 26 November 1998

D4: WO 99 27904 A (JOHNSON & SON INC.) 10 June 1999 cited in the application

D5: WO 97/39733 A (THE PROCTER & GAMBLE COMPANY) 30 October 1997

III. For the assessment of the present claim 10 on the question whether it is industrially applicable, no unified criteria exist in the PCT Contracting States. The patentability can also be dependent upon the formulation of the claims. The EPO, for example, does not recognize as industrially applicable the subject-matter of claims to the use of a compound in medical treatment, but may allow, however, claims to a known compound for first use in medical treatment and the use of such a compound for the manufacture of a medicament for a new medical treatment.

Claim 10 relates to subject-matter considered by this Authority to be covered by the provisions of Rule 67.1(iv) PCT. Consequently, no opinion will be formulated with respect to the industrial applicability of the subject-matter of this claim (Article 34(4)(a)(i) PCT).

- ٧. The subject-matter of the present claims is neither new nor involves an inventive step, in contrast to Article 33(1) to (3) PCT.
- 1. Present claim 1 claims a cosmetic composition comprising a quaternary ammonium agent and a tocopherol based anti-oxidant.
- 2. D1 discloses compositions comprising a quaternary ammonium compound and vitamin E as an anti-oxidant. (D1, claim 1, column 4, lines 33 to 41 and example) The compositions are applied to the skin. Similar compositions are also already known from D2, cf. D2, claim 1, where the betaine (e.g. trimethylglycine) must be regarded as a quaternary ammonium compound.
- The present application is directed to the problem of providing compositions giving 3. the benefits of tocopherol derivatives without showing negative side-effects. The



# INTERNATIONAL PRELIMINARY International EXAMINATION REPORT - SEPARATE SHEET

International application No. PCT/US00/17637

problem can be overcome by adding a quaternary ammonium compound to the composition.

It is submitted that the problem, if there is any, only can be solved when a considerable amount of quats is present. However, the application even includes composition comprising solely minor amounts. The subject-matter of the claims thus cannot be regarded as inventive within the entire scope of the claims.

Moreover, a huge number of cosmetic products comprise cationic surfactants/ emulsifiers, which are generally quaternary ammonium compounds. Furthermore, tocopherol antioxidants are also well known as a conventional additive for skin care products, see e.g. D3, page 40 and D5, page 33. The skilled worker, who would like to add quaternary ammonium compounds in order to take the advantages of such compounds (cf. D2 to D4) would formulate respective compositions without involving an inventive step.

Applicants did not show that there is any unexpected advantage by combining both components. Nevertheless, even if there was such an advantage, an inventive step could not be acknowledged, since the combination of both components in a skin care composition would appear to be very obvious due to the known advantages of both components.

4. The subject-matter of the dependent claims is either already known from D1 and D2 or at least obvious to those skilled in the art.

#### VII.

- 1. Compounds of formulae (IV), (V), and (VIII) on pages 8 and 9, respectively, do not reflect ammonium compounds.
- 2. Obviously the names of the compounds on page 12 are not correct. Apparently these compounds should be regarded as "esterquats". However, e.g. the term "canolyl-oxy" reflects an alkyloxy group rather than an acyloxy (ester) group.
- 3. The documents EP-A-789 076 and US-A-5880289 cited on pages 2 and 36, respectively, are apparently not directed to the field of cosmetics or to a related technical field.

## INTERNATIONAL PRELIMINARY

International application No. PCT/US00/17637

**EXAMINATION REPORT - SEPARATE SHEET** 

VIII. The vague and imprecise statement in the description on page 27 "spirit of the invention" implies that the subject-matter for which protection is sought may be different to that defined by the claims, thereby resulting in lack of clarity (Article 6 PCT) when used to interpret them (see also the PCT Guidelines, III-4.3a).

### T COOPERATION TREATY

## **PCT**

#### INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference		f Transmittal of International Search Report 20) as well as, where applicable, item 5 below.						
CM2340/2B ACTION								
International application No.	International filing date (day/month/year) (Earliest) Priority Date (day/month/year)							
PCT/US 00/17637	27/06/2000 28/06/1999							
Applicant								
THE PROCTER & GAMBLE COMP	THE PROCTER & GAMBLE COMPANY et al.							
This International Search Report has been according to Article 18. A copy is being tra	n prepared by this International Searching Auth ansmitted to the International Bureau.	ority and is transmitted to the applicant						
This International Search Report consists  It is also accompanied by	of a total of sheets. a copy of each prior art document cited in this	report.						
Basis of the report								
	international search was carried out on the bas ess otherwise indicated under this item.	is of the international application in the						
the international search w Authority (Rule 23.1(b)).	ras carried out on the basis of a translation of th	ne international application furnished to this						
b. With regard to any <b>nucleotide an</b> was carried out on the basis of the		ternational application, the international search						
1 =	onal application in written form.							
l 📙 '	ernational application in computer readable form	1.						
<u> </u>	this Authority in written form. this Authority in computer readble form.							
the statement that the sub	osequently furnished written sequence listing do is filed has been furnished.	pes not go beyond the disclosure in the						
		identical to the written sequence listing has been						
Certain claims were fou	nd unsearchable (See Box I).							
3. Unity of invention is lac	king (see Box II).							
4. With regard to the title,								
the text is approved as su	bmitted by the applicant.							
	thed by this Authority to read as follows:	MONTHIM COMPOUND AND TOCODUEDOL						
COSMETIC COMPOSITIONS CONTAINING A QUATERNARY AMMONIUM COMPOUND AND TOCOPHEROL								
	iomitted by the applicant. shed, according to Rule 38.2(b), by this Authorit e date of mailing of this international search rep							
6. The figure of the <b>drawings</b> to be publ								
as suggested by the appli	<del>-</del>	None of the figures.						
because the applicant fail	ed to suggest a figure.	<del>_</del>						
because this figure better	characterizes the invention.							

### INTERNATIONAL SEARCH REPORT

Application No Interna PCT/ 00/17637

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 A61K7/50 A61K7/00

C. DOCUMENTS CONSIDERED TO BE RELEVANT

A61K7/48

According to International Patent Classification (IPC) or to both national classification and IPC

#### B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) **A61K** 

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, PAJ, EPO-Internal, CHEM ABS Data

Category °	Citation of document, with indication, where appropriate, of the rele	evant passages	Relevant to claim No.
X	US 5 804 205 A (EPSTEIN ET AL.) 8 September 1998 (1998-09-08) cited in the application claims 1-4; table 1 column 4, line 39 - line 41		1-3,5,6, 9,10
X	EP 0 780 116 A (SHISEIDO COMPANY 25 June 1997 (1997-06-25) page 19 page 20 page 25	LIMITED)	1,2,5,6, 9,10
χ Furt	her documents are listed in the continuation of box C.	X Patent family members are listed i	n annex.
"A" docume consider filing of "L" docume which citatio	ent defining the general state of the art which is not lered to be of particular relevance document but published on or after the international late ent which may throw doubts on priority claim(s) or	"T" later document published after the inter or priority date and not in conflict with a cited to understand the principle or the invention "X" document of particular relevance; the cleannot be considered novel or cannot involve an inventive step when the document of particular relevance; the cleannot be considered to involve an	the application but ony underlying the aimed invention be considered to considered to consi

Ryadress of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31–70) 340–2040, Tx. 31 651 epo nl, Fax: (+31–70) 340–3016

Name and mailing address of the ISA

Form PCT/ISA/210 (second sheet) (July 1992)

document published prior to the international filing date but later than the priority date claimed

Date of the actual completion of the international search

19 October 2000

"&" document member of the same patent family

25/10/2000

Authorized officer

Date of mailing of the international search report

Alvarez Alvarez, C

# INTERNATIONAL SEARCH REPORT

PCT Application No 00/17637

		FC1/\$\to\$1/103/
	ation) DOCUMENTS CONSIDERED TO BE RELEVANT	
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	WO 98 52530 A (THE PROCTER & GAMBLE COMPANY) 26 November 1998 (1998-11-26) claims 1,9; example 2 page 39, line 32 -page 40, line 17 page 42, line 12 -page 44, line 5 page 5, line 18 -page 8, line 15	1,2,4-6, 9,10 3,7,8
1		3,7,0
Υ	WO 99 27904 A (S.C.JOHNSON & SON INC.) 10 June 1999 (1999-06-10) cited in the application table 1 page 11, line 10 - line 22 page 12, line 5 - line 21	3
Y	WO 97 39733 A (THE PROCTER & GAMBLE COMPANY) 30 October 1997 (1997-10-30) example 1 page 19, line 19 - line 29 page 9, line 27 page 5, line 33 -page 8, line 34	7
Υ	WO 96 03970 A (WITCO CORPORATION) 15 February 1996 (1996-02-15) page 1, line 4 - line 6 page 3, line 7 - line 24 page 7, line 27 -page 9, line 25 page 16 "Formulation 1-1" page 27 "Formulation 3-3" page 28 "Formulation 3-4" claims 12-21	7
Y	W0 98 46199 A (CAPSULIS) 22 October 1998 (1998-10-22) claims 5-7; examples 1,9 page 6, line 29 -page 8, line 13	8

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### INTERNATIONAL SEARCH REPORT

Informati

patent family members

Application No PCT 00/17637

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
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			WO	9730679 A	28-08-1997
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	•	22 23 22 2	AU	7340798 A	11-11-1998
			EP	0975307 A	02-02-2000

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 A61K7/50 A61K7/00

A61K7/48

According to International Patent Classification (IPC) or to both national classification and IPC

#### B. FIELDS SEARCHED

 $\begin{tabular}{ll} \begin{tabular}{ll} Minimum documentation searched (classification system followed by classification symbols) \\ \begin{tabular}{ll} IPC & 7 & A61K \end{tabular}$ 

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, PAJ, EPO-Internal, CHEM ABS Data

C. DOCOM	INTS CONSIDERED TO BE RELEVANT	
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X	EP 0 780 116 A (SHISEIDO COMPANY LIMITED) 25 June 1997 (1997-06-25) page 19 page 20 page 25	1,2,5,6, 9,10
	-/	

Further documents are listed in the continuation of box C.	X Patent family members are listed in annex.
"A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date  "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)  "O" document referring to an oral disclosure, use, exhibition or other means  "P" document published prior to the international filing date but later than the priority date claimed	<ul> <li>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention.</li> <li>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone.</li> <li>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</li> <li>"&amp;" document member of the same patent family</li> </ul>
Date of the actual completion of the international search	Date of mailing of the international search report
19 October 2000	25/10/2000
Name and mailing address of the ISA  European Patent Office, P.B. 5818 Patentlaan 2  NL – 2280 HV Rijswijk  Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer  Alvarez Alvarez, C

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	ntion) DOCUMENTS CONSIDERED TO BE RELEVANT	
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
,	WO 98 52530 A (THE PROCTER & GAMBLE COMPANY) 26 November 1998 (1998-11-26) claims 1,9; example 2 page 39, line 32 -page 40, line 17 page 42, line 12 -page 44, line 5 page 5, line 18 -page 8, line 15	1,2,4-6, 9,10 3,7,8
,	WO 99 27904 A (S.C.JOHNSON & SON INC.) 10 June 1999 (1999-06-10) cited in the application table 1 page 11, line 10 - line 22 page 12, line 5 - line 21	3
,	WO 97 39733 A (THE PROCTER & GAMBLE COMPANY) 30 October 1997 (1997-10-30) example 1 page 19, line 19 - line 29 page 9, line 27 page 5, line 33 -page 8, line 34	7
•	WO 96 03970 A (WITCO CORPORATION) 15 February 1996 (1996-02-15) page 1, line 4 - line 6 page 3, line 7 - line 24 page 7, line 27 -page 9, line 25 page 16 "Formulation 1-1" page 27 "Formulation 3-3" page 28 "Formulation 3-4" claims 12-21	7
Y	WO 98 46199 A (CAPSULIS) 22 October 1998 (1998-10-22) claims 5-7; examples 1,9 page 6, line 29 -page 8, line 13	8

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Inte .lonal Application No PCT/US 00/17637

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